MDCH Bureau of Laboratories Pandemic Influenza Plans

Dear Colleagues:

Public health laboratories (PHLs) at the state and federal levels have been working together with groups representing clinical laboratories to address testing issues surrounding yet another emerging infectious disease. Avian influenza is particularly challenging for laboratories because USDA restricts the possession of this agent, or even genetic material derived from this agent, to veterinary/agricultural laboratories of BSL 3⁺ agricultural safety level due to its danger to domestic poultry. This restriction has made it difficult to develop test procedures; validation of the performance of a test is difficult when possession of positive control material is prohibited.

In January, we did receive positive control material from CDC authenticated by USDA as noninfectious for the PCR procedure distributed to PHLs, and now have the capacity to test clinical samples in suspect cases of Avian influenza. The next step was to develop an algorithm to direct testing of clinical samples, which follows this letter and can also be found at: www.michigan.gov/mdchlab, under "Influenza testing and surveillance". Please review this algorithm and share it with your Infection Control and Emergency Departments, as well as with health care providers in your medical community.

In addition to this algorithm, we have produced a PowerPoint presentation on our preparations. We are considering avenues to share this presentation because we believe some of the surveillance and biosafety preparations therein may be useful for clinical microbiology laboratories as well. Presently we plan to web-cast and archive this presentation but recognizing not everyone has web-access, we could also make a CD_ROM available. Further information will be provided when the presentation is complete.

As we worked through the potential testing needs of a pandemic, it became clear that the capacity at the state laboratory in Lansing could be insufficient to meet the needs of Michigan. We therefore have developed a two-pronged approach to expand capacity. First, molecular equipment (Roche Light Cycler) to perform this testing was placed in each of our regional LRN reference laboratories and their staff has been trained in its use. Once prevalence exceeds a certain level, we are hopeful test procedures could be shared with the clinical laboratory community. To that end, we are assessing molecular capacity of clinical laboratories in Michigan.

Please take a moment to let us know how we can best include your facility in these preparations by faxing or e-mailing your responses to these questions to us today. Or enter your responses online at http://www.questionpro.com/akira/TakeSurvey?id=362926
Thank you.

Patty Clark, MPH Interim Virology Manager (517) 335-8102 clarkp@michigan.gov Patricia A. Somsel, DrPH Director, Division of Infectious Diseases (517) 335-8067 somselp@michigan.gov NOTE: See Biosafety guidance for Avian influenza at: www.michigan.gov/mdchlab

Please e-mail your responses to Patty Clark (<u>clarkp@michigan.gov</u>) or fax to her attention at: 517-335-9631.

You may also enter your responses online at http://www.questionpro.com/akira/TakeSurvey?id=362926

- O My facility has web-access and will be able to view the webcast of the BOL Pandemic Flu presentation when available.
- O My facility does not have web-access and I need to receive the BOL Pandemic Flu presentation in CD_ROM format.

0	My facility has molecular capabilities utilizing:
	O Roche Light Cycler 1.2
	O Roche Light Cycler 2.0
	O ABI 7000
	O ABI 7300
	O ABI 7500
Name:	
E-Mail:	
Phone	:FAX:
Laboratory:	
Address:	

Influenza H5 Algorithm Michigan Department of Community Health Instructions for Clinical Labs at WHO Level 3 or WHO Level 4, 5, or 6 with NO previous Michigan cases

NOTE: This algorithm will be updated as the situation evolves. Please visit the MDCH website at www.michigan.gov/flu and MIHAN for updates.

WHO Level 3 -No or very limited human-to-human transmission.

WHO Level 4 – Evidence of increased human-to-human transmission.

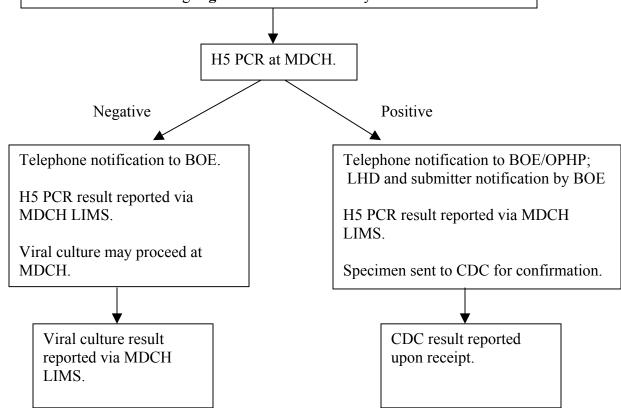
WHO Level 5 – Evidence of significant human-to-human transmission.

WHO Level 6 - Efficient and sustained human-to-human transmission.

Avian Influenza Suspect Case:

Pre-approval for Avian Influenza testing required by Bureau of Epidemiology (BOE), 517-335-8165 or 517-335-9030 after hours.

Collect specimen and ship to MDCH by fastest means. The submitting lab should not set-up or order viral cultures but may continue with routine culture testing for alternative agents. Samples should be submitted to MDCH for H5 testing **regardless** of results of any other influenza tests.



Influenza H5 Algorithm Michigan Department of Community Health Instructions for Clinical Labs at WHO Level 4, 5, 6 with cases previously identified in Michigan

NOTE: This algorithm will be updated as the situation evolves. Please visit the MDCH website at www.michigan.gov/flu and MIHAN for updates.

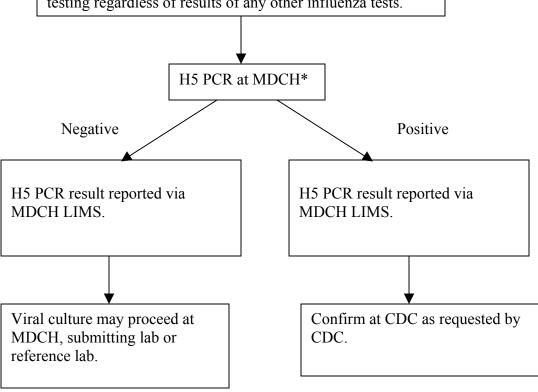
WHO Level 4 – Evidence of increased human-to-human transmission.

WHO Level 5 – Evidence of significant human-to-human transmission.

WHO Level 6 – Efficient and sustained human-to-human transmission.

Avian Influenza Suspect Case:

Collect two specimens and ship one to MDCH by fastest means. Hold second specimen for cell culture and proceed **only** after notification of negative H5 results. Consider H5 testing regardless of results of any other influenza tests.



^{*}Bureaus of Laboratories and of Epidemiology will jointly determine when H5 testing for surveillance is no longer indicated. Further guidance on testing will be provided at that time.